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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of

Thomas M. Morris

Serial Number 10/728,671

Filed: December 5, 2003

For: LIGHT EMITTING ASSEMBLY WITH HEAT DISSIPATING SUPPORT

Art Unit 2879

Examiner Dalei Dong

Letter and Argument

Commissioner for Patents  
P. O. Box 1450  
Arlington, Virginia 22213-1450

Dear Sir:

This is in further response to the Official Office Action of May 3, 2006.

Because of a failure of communication, two amendments were filed on November 3, 2006 - one by the undersigned and one by an associate attorney. Please disregard the amendment filed by the associate attorney.

Although it is preferred for the Examiner to consider the amendment filed by the undersigned, the arguments made by the associate attorney are valid because the claims in that amendment

are broader than those filed by the undersigned. Thus, the following paragraphs repeat the arguments in the amendment filed by the associate attorney.

The examiner has rejected the claims of the application under 35 U.S.C. 103(a) as being unpatentable over Hochstein 5,857,767 in combination with various references. Applicant, through his attorney, has amended the claims in a manner believed to overcome the rejections based on various combinations of the Hochstein '767 reference.

Hochstein '767, in fact, teaches away from the invention. The gap, 24, in Hochstein '767, is not present in the instant invention, and teaches away from the emphasized feature of the flat thermally proximate relationship between the thermal conductor of the instant invention, and the substrate. Further, both the substrate and the dielectric material comprising the circuit traces are inorganic materials, not organic polymers.

To apply additional references in combination with Hochstein '767 is to simply agglomerate features together in an attempt to obviate the synergistic combination of features of the instant invention. To use the thermal paste of Song 6,670,71 to fill the gaps 24 on Hochstein '767 is to defeat a particular feature of Hochstein, and requires a cumbersome assembly step, still not teaching a light emitting assembly having effective heat transfer

with a thermal conductor in proximate relationship to an LED, having inorganic dielectric and metal bonded to the inorganic coating on the substrate. Using the paste of Song, which emphasizes the use of spaces for heat sink purposes, provides a stop-gap measure at best.

As the examiner is aware, the rate of deterioration of LED function with rise in temperature is significant. As shown in the copy of the tests conducted comparing applicant's invention, known as ANOTHERM, to a device very similar to Hochstein '767, shown as IMS or insulated metal substrate, with an epoxy material filled with some inorganic dielectric, as where the ANOTHERM device has superior performance.

It is accordingly submitted that this application is in condition for allowance and early steps toward that end are earnestly solicited.

hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450 on 12/5/06

12/5/06

Date

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Signature

Respectfully submitted,

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